

INFRARED DREAM TEAM.



#**INFRARED**DREAMTEAM

*WE speed up
the future*

Infrared Dream Team

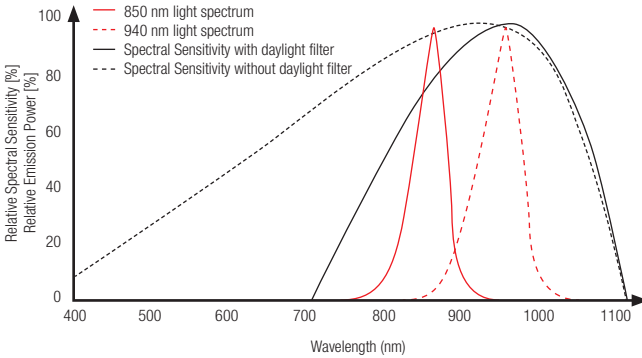
The infrared emitters and photodetectors from Würth Elektronik ensure perfect optical coupling and extremely fast switching times. Provided in all industry standard packages. Optimize your sensing applications, data transfer or detection uses. Available ex stock. Samples free of charge.

- Perfect optical coupling
- Fast switching times
- Wavelengths: 850 & 940 nm
- With/without daylight filter

For further information, please visit: www.we-online.com/infrared

IR LEDs & Photodetectors

Perfect Match Efficiency

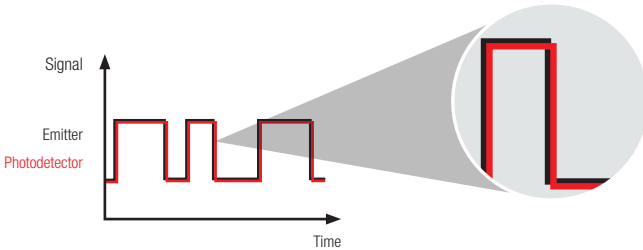


The maximum sensitivity of the photodetectors perfectly matches the emitter spectrum.

Perfect match of IR LEDs and Photodetectors:
100 % @ 940 nm with filter
95 % @ 850 nm without filter

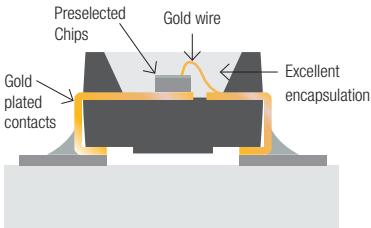
Switching Time up to 100 MHz

The extremely fast switching time of a few nanoseconds ensures high data transfer rates.



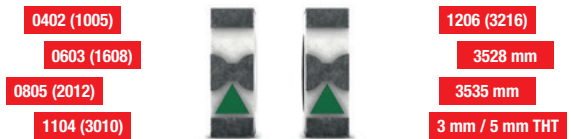
Perfect Quality

Excellent Quality



All parts with gold wire for excellent contact

Industry Standard Package



Emitter & photodetector are available in all industry standard packages

The graphs are for illustration purpose only. Real products and behavior might differ for single products.

Applications



Security systems

e.g. smoke detector, camera



Home appliances

e.g. remote control, cleaning robot



Light barriers

e.g. security areas, counter and encoder, optoelectronic sensors, data transmission



Automatic switches

e.g. touchless water syphons, toilet systems, hygiene applications, water saving systems



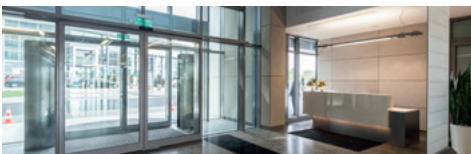
Biometric identification

e.g. iris recognition, face recognition, vein recognition



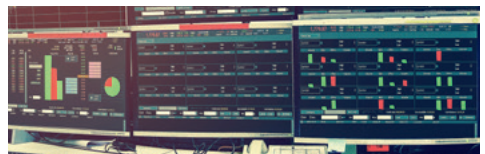
Biometrics & health monitoring

e.g. heart rate monitoring, pulse oximetry, blood pressure



Sensors

e.g. automatic doors, automatic light, presence sensors



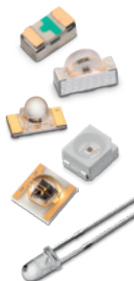
Screens

e.g. touch & touchless

IR LEDs & Photodetectors

Product Overview

Infrared LEDs



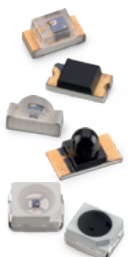
Series	Size	Wavelength (nm)	Radiant Intensity (mW/sr)	Viewing Angle
WL-SICW	0402,0603,1206	850/940	5-6 @ 20 mA	80°-150°
WL-SISW	0402,1106,1104,1002,1206		0.8-11 @ 20 mA	45°-150°
WL-SIRW	1206		5-20 @ 20 mA	30°
WL-SITW	3528		8-9 @ 50 mA	120°
WL-SIMW	3535		220-350 @ 1 A	90°/130°
WL-TIRW	3 mm, 5 mm		30-85 @ 50 mA	35°

Select the suitable photodetector

Photodiodes and Phototransistors



Series	Size	Wavelength (nm)	Photocurrent @ VR=5V, Ee=1mW/cm ² (uA)	Viewing Angle
WL-SDCB	1206	940	1.8	140°
WL-SDSB	1104		2.5	150°
WL-TDRW	THT 5 mm		28	35°
WL-TDRB	THT 5 mm		31	35°



Series	Size	Wavelength (nm)	Photocurrent @ VR=5V, Ee=1mW/cm ² (mA)	Viewing Angle
WL-STCW	0603	940	1.6	150°
WL-STCB	1206		1.8	140°
WL-STSW	1104		2.5	150°
WL-STRB	1206 dome		1.8	30°
WL-STTW	3528		3.1	120°
WL-STTB	3528		2.8	120°

More information on:
www.we-online.com/infrared



Infrared LED Design Kit – Order Code: 154150

